



MIAMI-DADE COUNTY
BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

www.buildingcodeonline.com

NOTICE OF ACCEPTANCE (NOA)

Eastern Metal Supply, Inc.
4268 Westroads Dr.
West Palm Beach, Florida 33407

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: 0.030" Galvanized Steel Storm Panels Shutter

APPROVAL DOCUMENT: Drawing No. 05-073, titled "0.030" Thick Galvanized Bertha Steel Storm Panel", sheets 1 through 9 of 9, and 1A of 9, prepared by Tilteco, Inc., dated 04/25/2005, last revision #1 dated 04/25/2005 signed and sealed by Walter A. Tillit Jr., P.E. on 09/15/2005, bearing Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and expiration date by Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each panel shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises NOA # 04-0517.01** and consists of this page 1, evidence submitted pages E-1 and E-2 as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E.**

Helmy A. Makar
 07/13/2006

NOA No 05-0926.02
Expiration Date: 06/07/2009
Approval Date: 07/13/2006
Page 1



NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #00-0919.10

A. DRAWINGS

1. *Drawing No. 00-252, titled "24 Gage Galvanized Bertha Steel Storm Panels", prepared by Tilteco, Inc., dated July 10, 2000, last revision #1 dated April 3, 2001, sheets 1 through 9 of 9, signed and sealed by Walter A. Tillit Jr., P.E.*

B. TESTS

1. *Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test of Galvanized Steel Storm Panels, prepared by American Test Lab of South Florida, Report No. ATL 0425.01-00, dated August 22, 2000, signed and sealed by Henry Hattem, P.E. and William R. Mehner, P.E.*

C. CALCULATIONS

1. *Storm panel shutter Calculations, sheets 1 through 78 by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E., dated 09/11/2000.*

D. MATERIAL CERTIFICATIONS

1. *Mill Certified Inspection Report, dated 05/97, for Hot Dipped Galvanized coating G-60 Steel, ASTM A653 Grade 40 (ASTM 446GR-C) by Robert O'Neil of R & R Metals, Inc., with chemical composition and physical properties.*
2. *Tensile Test Reports from Hurricane Engineering & Testing Inc., Job No. HETI-97-T48 dated July 17, 1997 for 20 ga. Galvanized Steel, tested per ASTM E8-93, signed and sealed by Hector M. Medina, P.E.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #02-0809.04

A. DRAWINGS

1. *Drawing No. 02-446, titled " 24 gage Galvanized Bertha Steel Storm Panel ", sheets 1 through 9 of 9, prepared by Tilteco, Inc., dated September 05, 2002, signed and sealed by Walter A. Tillit Jr., P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. MATERIAL CERTIFICATIONS

1. *None.*



Helmy A. Makar, P. E.
Product Control Examiner
NOA No 05-0926.02
Expiration Date: 06/07/2009
Approval Date: 07/13/2006

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 04-0517.01

A. DRAWINGS

1. *Drawing No. 02-446, titled " 24 gage Galvanized Bertha Steel Storm Panel ", sheets 1 through 9 of 9, prepared by Tilteco, Inc., dated September 05, 2002, signed and sealed by Walter A. Tillit Jr., P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None.*

4. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 05-073, titled " 0.030" Thick Galvanized Bertha Steel Storm Panel", sheets 1 through 9 of 9, and 1A of 9, prepared by Tilteco, Inc., dated 04/25/2005, last revision #1 dated 04/25/2005 signed and sealed by Walter A. Tillit Jr., P.E. on 09/15/2005*

B. TESTS

1. *Test report on Large Missile Impact Test and Cyclic Wind Pressure Test of Galvanized Steel Storm Panels, prepared by American Test Lab of South Florida, Report No. ATLSF 0616.01-05, dated September 15, 2005, signed and sealed by William R. Mehner, P.E.*

C. CALCULATIONS

1. *Storm panel shutter Calculations, sheets 1 through 91 by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E. on 09/13/2005.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *Tensile Test Report from QC Metallurgical, Inc., Job No. 51M-926, dated September 20, 2005, tested per ASTM E8-93, signed and sealed by Frank Grate, P.E.*



Helmy A. Makar, P. E.
Product Control Examiner
NOA No 05-0926.02
Expiration Date: 06/07/2009
Approval Date: 07/13/2006

GENERAL NOTES:

1. STORM PANEL SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2004 EDITION OF THE FLORIDA BUILDING CODE. DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1620 OF THE ABOVE MENTIONED CODE, FOR A BASIC WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE STORM PANEL WILL BE INSTALLED, AND FOR A DIRECTIONALITY FACTOR $K_d=0.85$, IN ACCORDANCE WITH ASCE 7-98 STANDARD. IN ORDER TO VERIFY THAT COMPONENTS AND ANCHORS ON THIS P.A.D. AS TESTED WERE NOT OVER STRESSED, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS WAS **NOT** USED IN THEIR ANALYSIS. A DURATION FACTOR $CD=1.60$ WAS USED FOR VERIFICATION OF FASTENERS IN WOOD.
2. ALL STEEL SHEET METAL PANELS SHALL HAVE STRUCTURAL QUALITY ASTM A653 SQ, GRADE 40, WITH G-90 GALVANIZED STEEL DESIGNATION & $F_y=52.3$ ksi. (AFTER ROLLED)
3. ALL ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ASSOCIATION 6063-T6 ALLOY & TEMPER UNLESS OTHERWISE NOTED.
4. ALL SCREWS TO BE STAINLESS STEEL 304 OR 316 AISI SERIES OR CORROSION RESISTANT COATED CARBON STEEL AS PER DIN 50018 W/ 50 ksi YIELD STRENGTH AND 90 ksi TENSILE STRENGTH.
5. BOLTS TO BE ASTM A-307 GALVANIZED STEEL, OR AISI 304 SERIES STAINLESS STEEL, WITH 36 ksi MINIMUM YIELD STRENGTH.
6. ANCHORS TO WALL SHALL BE AS FOLLOWS: (UNLESS OTHERWISE NOTED).
 - (A) TO EXISTING POURED CONCRETE ($f'_c=3$ ksi):
 - 1/4" ϕ TAPCONS & MAXI-SET TAPCONS AS MANUFACTURED BY I.T.W./BUILDEX.
 - 1/4" ϕ CRETE-FLEX SS4 ANCHORS AS MANUFACTURED BY ELCO TEXTRON.
 - 1/4" ϕ x 7/8" CALK-IN ANCHORS, 1/4" ϕ ELCO male & female "PANELMATE" OR 1/4" ϕ ELCO male "PANELMATE PLUS" AS MANUFACTURED BY POWER FASTENERS, INC. AND ELCO TEXTRON, RESPECTIVELY.
 - 3/8" ϕ RED HEAD DYNABOLT SLEEVE ANCHORS AS MANUFACTURED BY I.T.W. BUILDEX.
 - 1/4" ϕ x 3/4" ALL POINTS SOLID-SET ANCHORS AS DISTRIBUTED BY ALL POINTS SCREW, BOLT & SPECIALTY COMPANY.

- NOTES:
- A.1) MINIMUM EMBEDMENT INTO POURED CONCRETE OF TAPCON ANCHOR OR CRETE-FLEX SS4 IS 1 3/4", FOR ELCO PANELMATES IS 2", FOR RED HEAD DYNABOLT IS 1 1/2", FOR ELCO male "PANELMATE PLUS" IS 2".
 - A.2) 7/8" CALK-IN ANCHORS SHALL BE ENTIRELY EMBEDDED INTO THE POURED CONCRETE. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. 1/4" ϕ -20 SCREWS USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST, AND 1" MINIMUM FOR WALLS WITH NO STUCCO.
 - A.3) MINIMUM EMBEDMENT OF 1/4" ϕ x 3/4" ALL POINTS SOLID-SET ANCHORS SHALL BE 7/8" INTO THE POURED CONCRETE. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. 1/4" ϕ -20 S.S. MACHINE SCREW USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST, AND 1" MINIMUM FOR WALLS WITH NO STUCCO.
 - A.4) IN CASE THAT PRECAST STONE, PRECAST CONCRETE PANELS, OR PAVERS BE FOUND ON THE EXISTING WALL OR FLOOR, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS, ANCHORAGE SHALL BE AS INDICATED ON NOTES A.1) & A.2) ABOVE.

- (B) TO EXISTING CONCRETE BLOCK WALL:
 - 1/4" ϕ TAPCONS & MAXI-SET TAPCONS AS MANUFACTURED BY I.T.W./BUILDEX.
 - 1/4" ϕ CRETE-FLEX SS4 ANCHORS AS MANUFACTURED BY ELCO TEXTRON.
 - 1/4" ϕ x 7/8" CALK-IN ANCHORS OR 1/4" ϕ ELCO male & female "PANELMATE" OR 1/4" ϕ ELCO male "PANELMATE PLUS" AS MANUFACTURED BY POWER FASTENERS, INC. AND ELCO TEXTRON, RESPECTIVELY.
 - 3/8" ϕ RED HEAD DYNABOLT SLEEVE ANCHORS AS MANUFACTURED BY I.T.W. BUILDEX.
 - 1/4" ϕ x 3/4" ALL POINTS SOLID-SET ANCHORS AS DISTRIBUTED BY ALL POINTS SCREW, BOLT & SPECIALTY COMPANY.

- NOTES:
- B.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS, ELCO PANELMATE, ELCO male "PANELMATE PLUS", RED HEAD DYNABOLT AND CRETE-FLEX SS4, INTO THE CONCRETE BLOCK UNIT SHALL BE 1 1/4".
 - B.2) 7/8" CALK-IN ANCHORS SHALL BE ENTIRELY EMBEDDED INTO THE CONCRETE BLOCK UNIT. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. 1/4" ϕ -20 SCREWS USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST, AND 1" MINIMUM FOR WALLS WITH NO STUCCO.
 - B.3) MINIMUM EMBEDMENT OF 1/4" ϕ x 3/4" ALL POINTS SOLID-SET ANCHORS SHALL BE 7/8" INTO THE CONCRETE BLOCK. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. 1/4" ϕ -20 S.S. MACHINE SCREW USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST, AND 1" MINIMUM FOR WALLS WITH NO STUCCO.
 - B.4) IN CASE THAT PRECAST STONE OR PRECAST CONCRETE PANELS BE FOUND ON THE EXISTING WALL, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS. ANCHORAGE SHALL BE AS INDICATED ON NOTES IN B.1) & B.2) ABOVE.

(C) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.

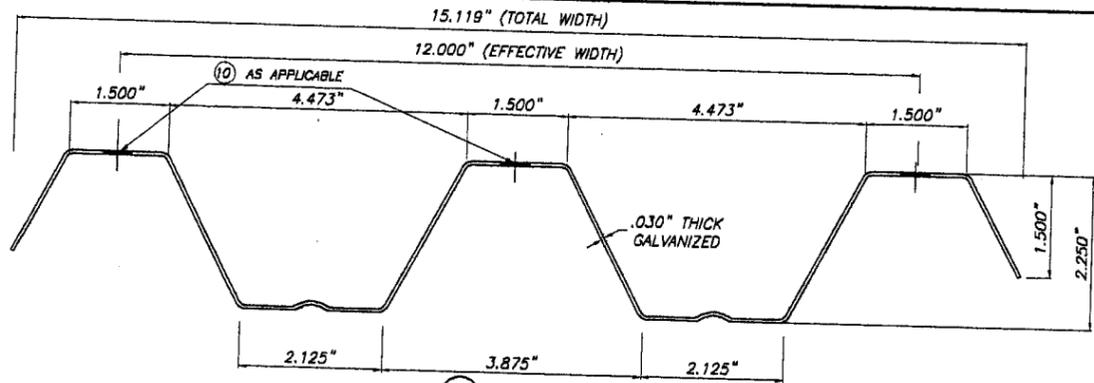
7. PANELS MAY ALSO BE INSTALLED HORIZONTALLY FOLLOWING INSTALLATION DETAILS SHOWN ON SECTIONS 1 THRU 8 (SHEET 2 & 3 OF 9) EXCEPT THAT HEADERS 2, 3 & 4 SHALL NOT BE USED.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE SHUTTER IS TO BE ATTACHED TO INSURE PROPER ANCHORAGE. THIS SHUTTER SHALL ONLY BE ATTACHED TO CONCRETE, BLOCK OR WOOD FRAME BUILDINGS.
9. THE INSTALLATION CONTRACTOR IS TO SEAL/CAULK ALL SHUTTER COMPONENT EDGES WHICH REMAIN IN CONTINUOUS CONTACT WITH THE BUILDING TO PREVENT WIND/RAIN INTRUSION. CAULK AND SEAL SHUTTER TRACKS ALL AROUND FULL LENGTH.
10. STORM PANEL INSTALLATION SHALL COMPLY WITH SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.
11. (a) THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.A.D.
- (b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT BASED ON THIS P.A.D. PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.
- (c) THIS PRODUCT APPROVAL DOCUMENT WILL BE CONSIDERED INVALID IF MODIFIED.
- (d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.A.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.A.D. ENGINEER, SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
- (e) THIS P.A.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.
12. SHUTTER MANUFACTURER'S LABEL SHALL BE PLACED ON A READILY AND VISIBLE LOCATION AT PANEL. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABEL SHALL READ AS FOLLOWS:
EASTERN METAL SUPPLY, INC.
WEST PALM BEACH, FL.
MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 05-0926.02
Expiration Date 06/07/2009
By *Walter A. Tillit Jr.*
Miami Dade Product Control
Division

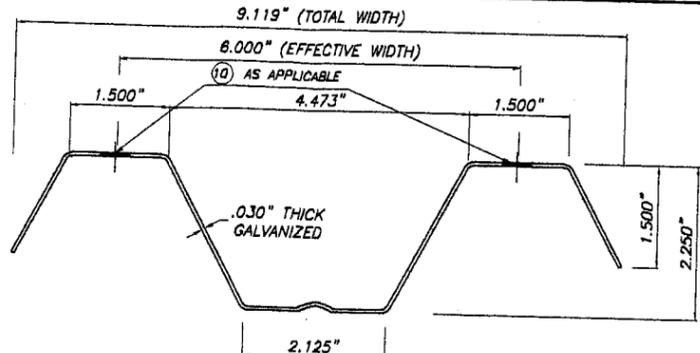
F.B.C. (High Velocity Hurricane Zone)

SEP 15 2005

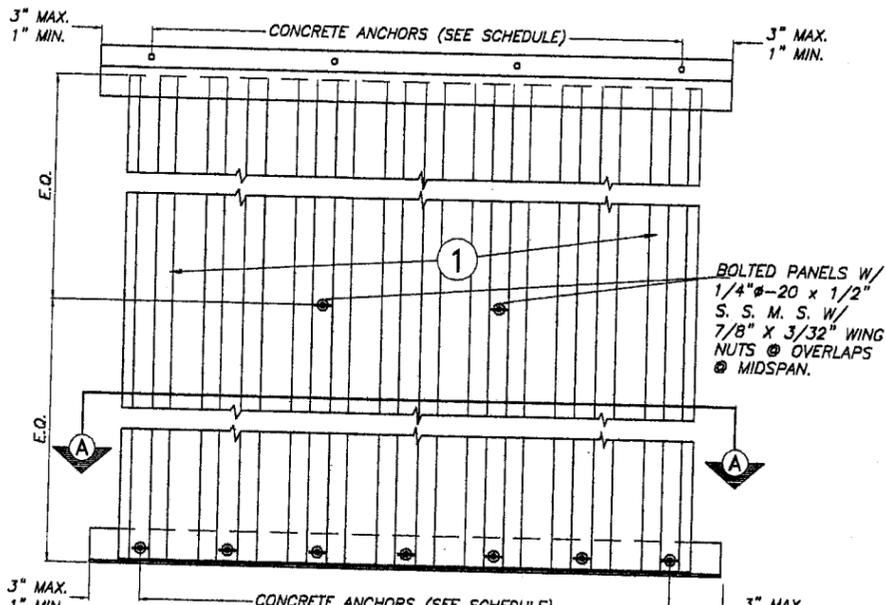
 TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone: (305)871-1530 Fax: (305)871-1531 EB-0006719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167	0.030" THICK GALVANIZED BERTHA STEEL STORM PANEL		L.G. DRAWN BY:		
	EASTERN METAL SUPPLY, INC. 4268 WESTROADS DR. WEST PALM BEACH, FL 33407		4/25/05 DATE		
REV. NO DESCRIPTION DATE REV. No DESCRIPTION DATE		05-073 DRAWING No			
1	OLD 02-446	4/25/05	3	-	-
2	-	-	4	-	-
SHEET 1 OF 9					



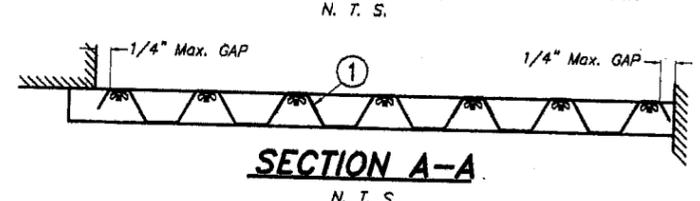
1 PANEL
SCALE: 3/8" = 1"



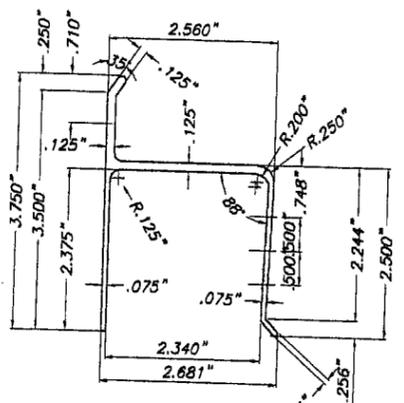
1A HALF PANEL
SCALE: 3/8" = 1"



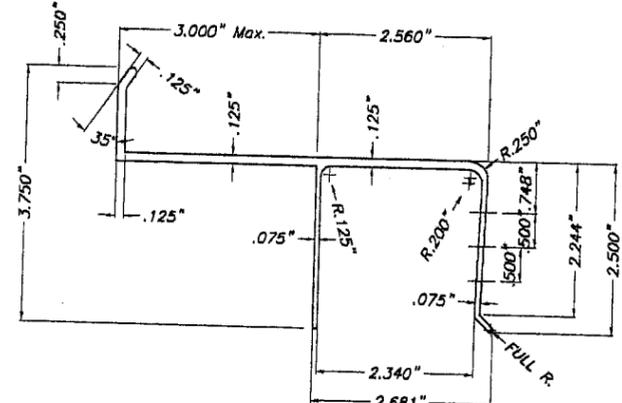
STORM PANEL TYPICAL ELEVATION
N. T. S.



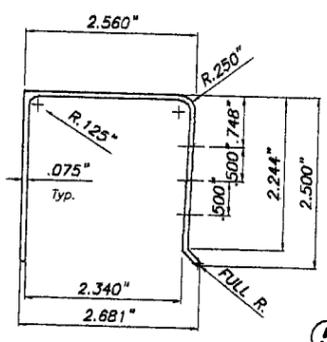
SECTION A-A
N. T. S.



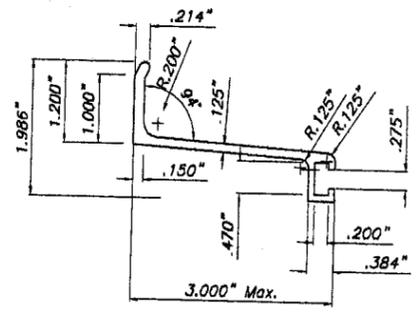
2 'h' HEADER
SCALE: 3/8" = 1"



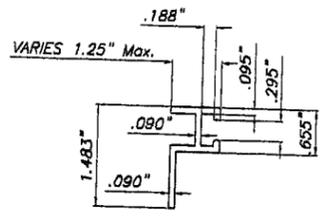
3 3" Max. 'U' BUILD OUT
SCALE: 3/8" = 1"



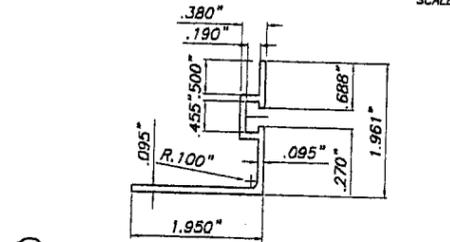
4 'U' HEADER
SCALE: 3/8" = 1"



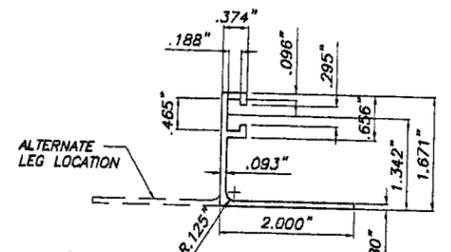
5 3" ANGLE BUILD OUT BRACKET
SCALE: 3/8" = 1"



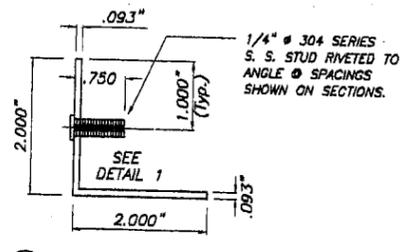
6 'F' TRACK
SCALE: 3/8" = 1"



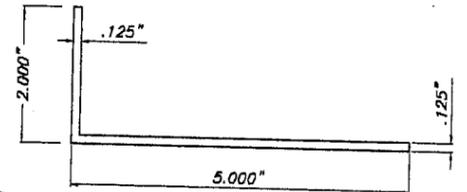
7 REVERSED 'F' ANGLE TRACK
SCALE: 3/8" = 1"



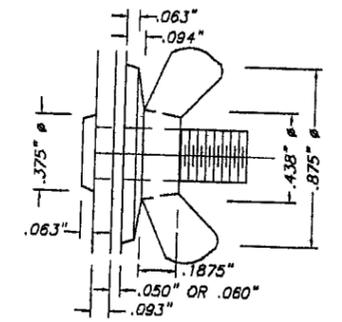
8 'F' TRACK ANGLE
SCALE: 3/8" = 1"



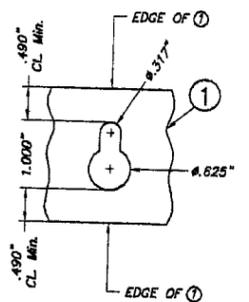
9 STUDDED ANGLE
SCALE: 3/8" = 1"



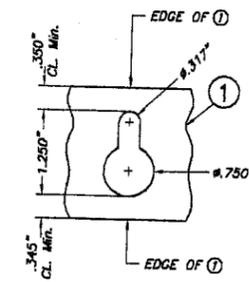
12 2" x 5" (Max.) x .125" ANGLE
SCALE: 3/8" = 1"



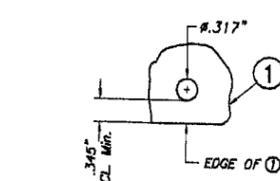
DETAIL 1: STUD W/ DIE CAST ZINC NICKEL PLATED WING NUT



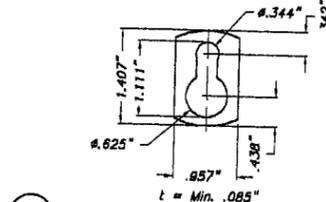
OPTION 1



OPTION 2



10A ROUND HOLE AT PANEL (OPTION TO 10)



11 KEY HOLE WASHER
3105-H154 ALUM. ALLOY
SCALE: 3/8" = 1"

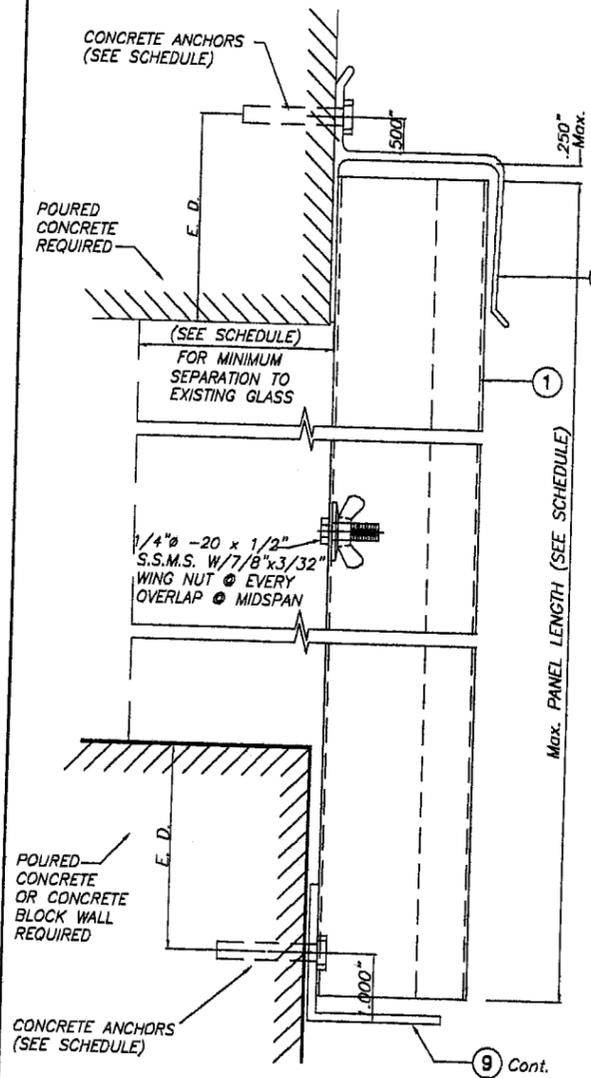
COMPONENTS

SEP 15 2005

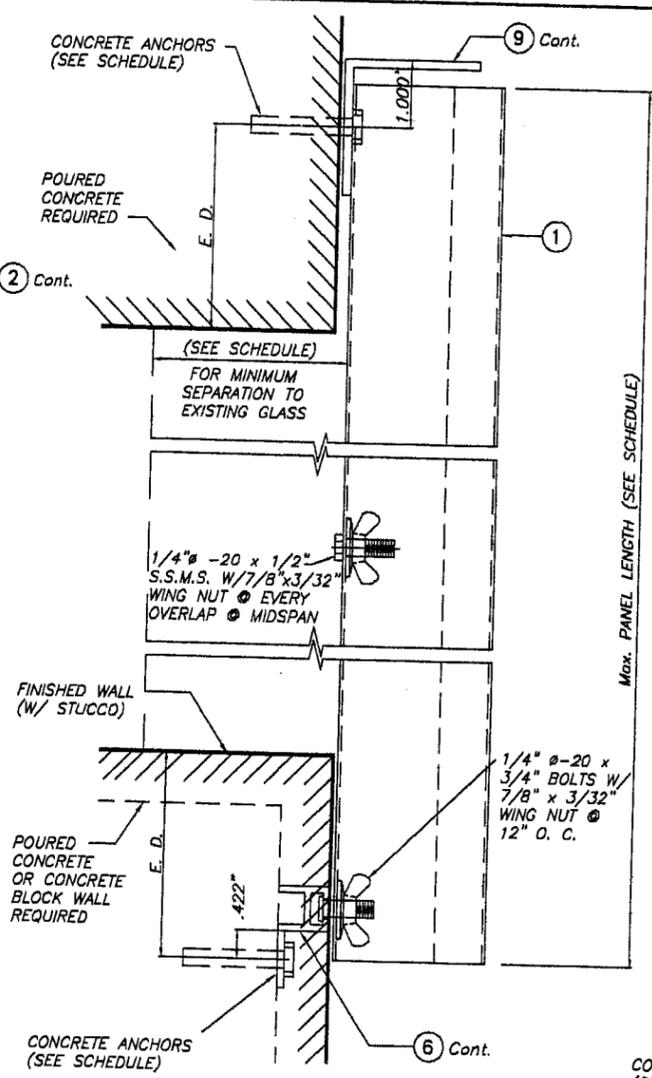
PRODUCT REVISED
to comply with the Florida
Building Code
Acceptance No. 05-9926.02
Expiration Date 06/07/2009
By *Helmut A. Mahr*
Miami Dad Product Control
Division

F.B.C. (High Velocity Hurricane Zone)

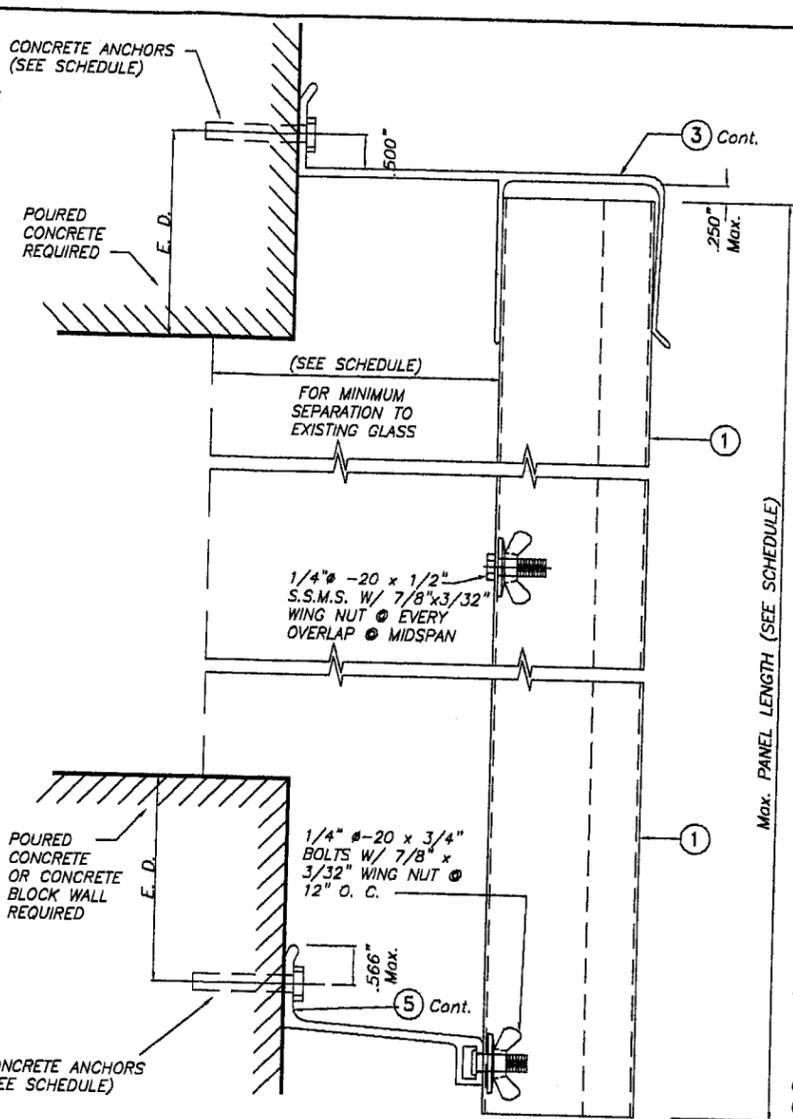
 TILECO INC. TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone: (305) 871-1330 Fax: (305) 871-1331 EB-0006719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167		0.030" THICK GALVANIZED BERTHA STEEL STORM PANEL		L.G. DRAWN BY:	
		EASTERN METAL SUPPLY, INC. 4268 WESTROADS DR. WEST PALM BEACH, FL 33407		4/25/05 DATE	
REV. NO 1 2		DESCRIPTION OLD 02-448 -		DATE 4/25/05 -	
REV. No 3 4		DESCRIPTION - -		DATE - -	
				05-073 DRAWING No	
				SHEET 1A OF 9	



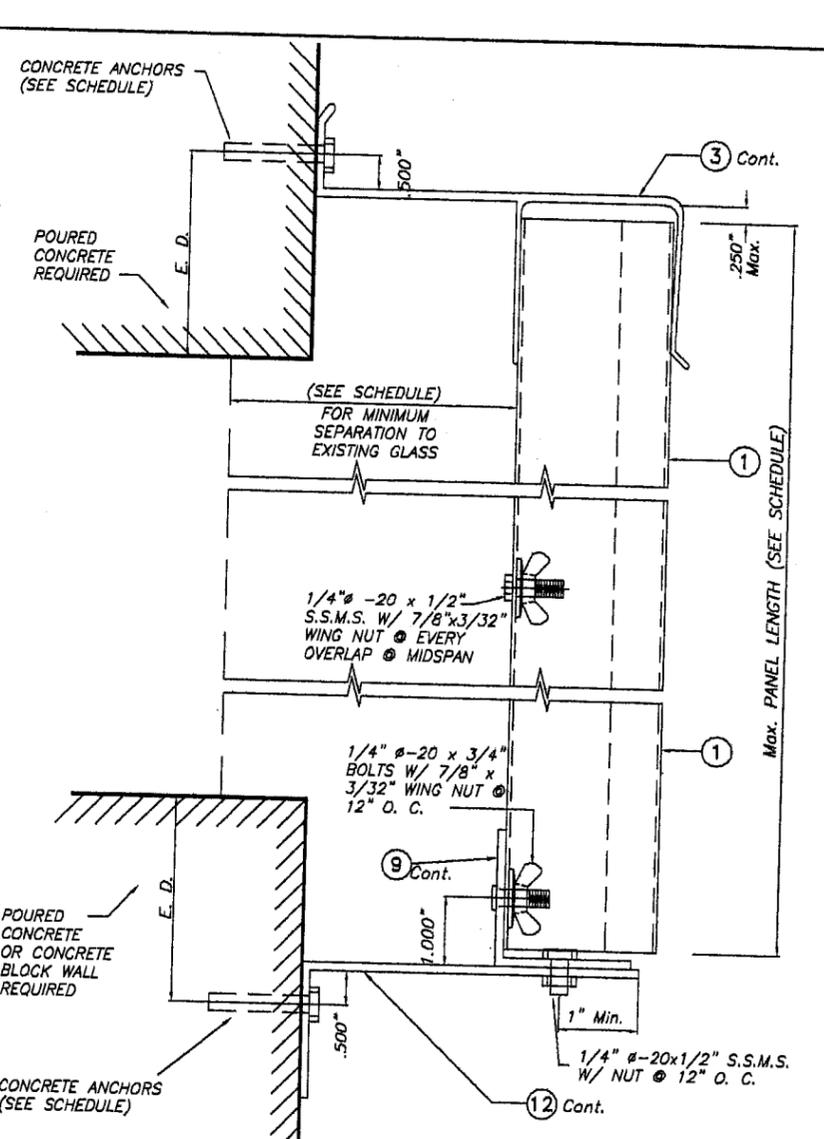
SECTION @ ANCHOR



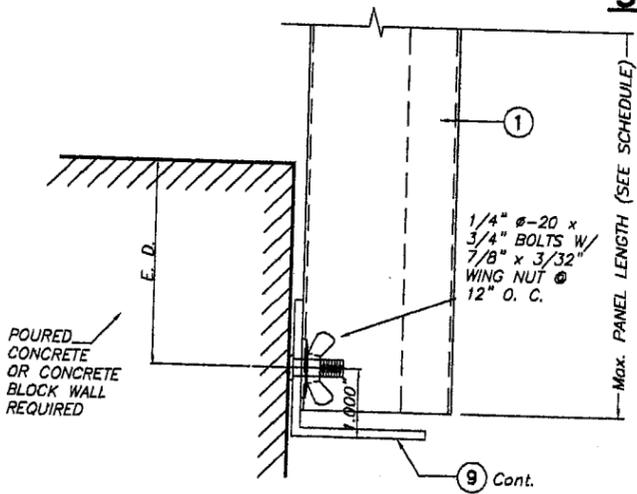
WALL MOUNTING INSTALLATION SECTION 2
SCALE: 3/8" = 1"



BUILD OUT INSTALLATION SECTION 3
SCALE: 3/8" = 1"



BUILD OUT INSTALLATION SECTION 4
SCALE: 3/8" = 1"



SECTION @ STUD

WALL MOUNTING INSTALLATION SECTION 1
SCALE: 3/8" = 1"

NOTE: DETAIL OF SECTION @ STUD VALID ALSO FOR WALL MOUNTING INSTALLATION - SECTION 2 (TOP)

E. D. = EDGE DISTANCE
(SEE SCHEDULE ON SHEET 5, 6 & 7 OF 9)

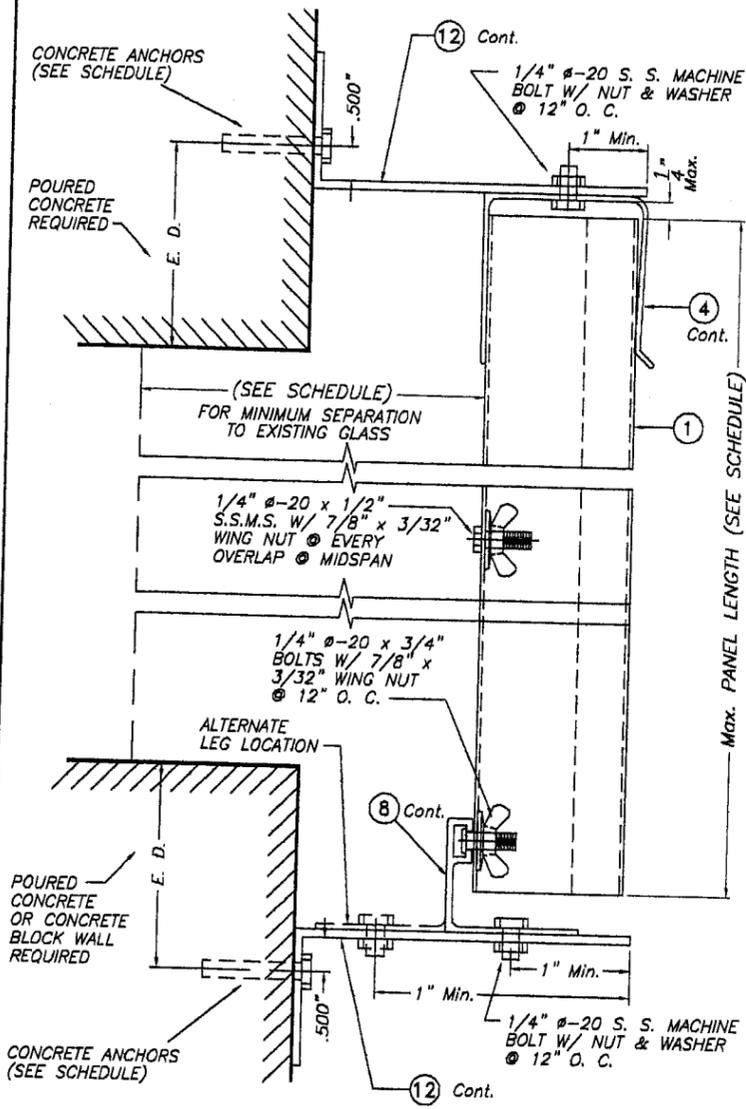
NOTE FOR COMBINATION OF SECTIONS:
WALL/FLOOR/CEILING MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

SEP 15 2005

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 05-0926.02
Expiration Date 06/07/2009
By *Helmut A. Miller*
Miami Dade Product Control
Division

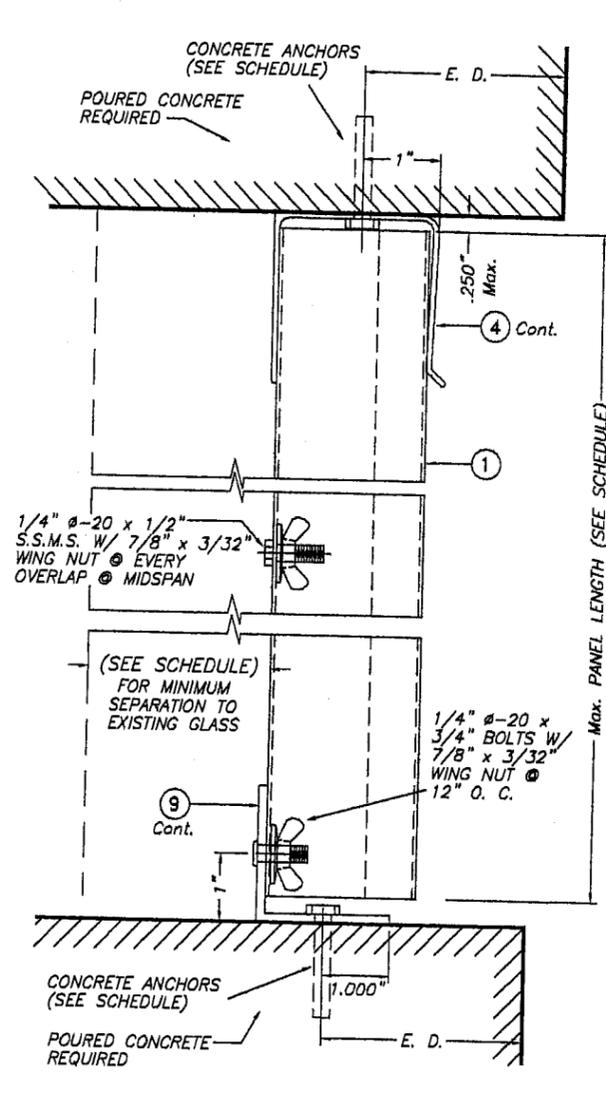
F.B.C.(High Velocity Hurricane Zone)

 TILLIT TESTING & ENGINEERING COMPANY 8355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33168 Phone: (305)871-1530 Fax: (305)871-1531 EB-0006719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167		0.030" THICK GALVANIZED BERTHA STEEL STORM PANEL		L.G. DRAWN BY:	
		EASTERN METAL SUPPLY, INC. 4268 WESTROADS DR. WEST PALM BEACH, FL 33407		4/25/05 DATE	
REV. NO. DESCRIPTION DATE 1 OLD 02-446 4/25/05 2 - - -		REV. No DESCRIPTION DATE 3 - - - 4 - - -		05-073 DRAWING No	
				SHEET 2 OF 9	



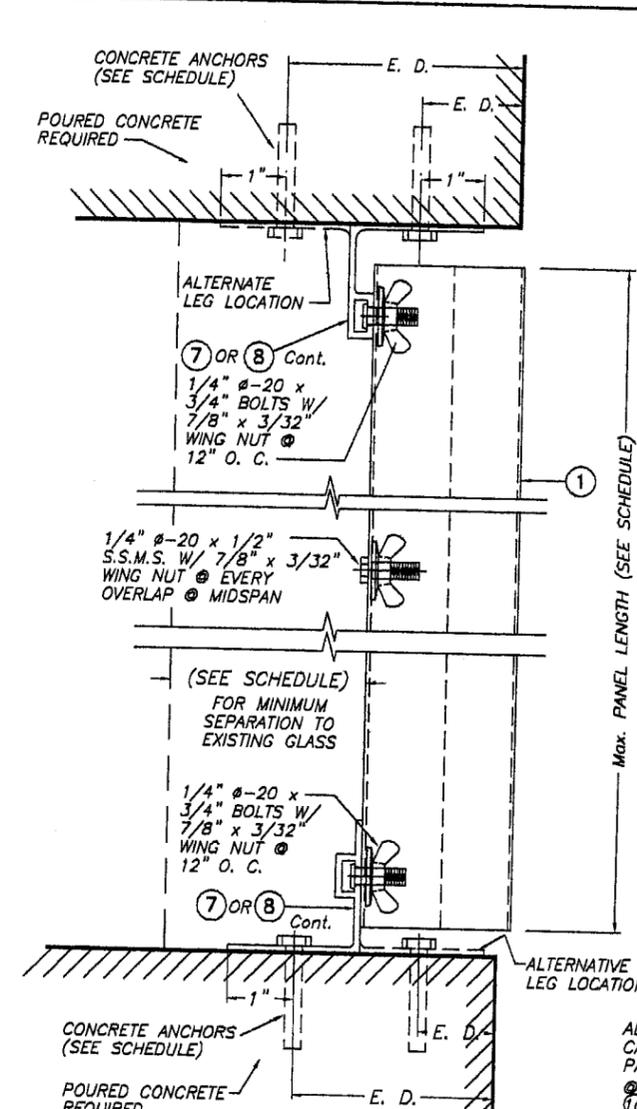
BUILD OUT INSTALLATION
- SECTION 5

SCALE : 3/8" = 1"



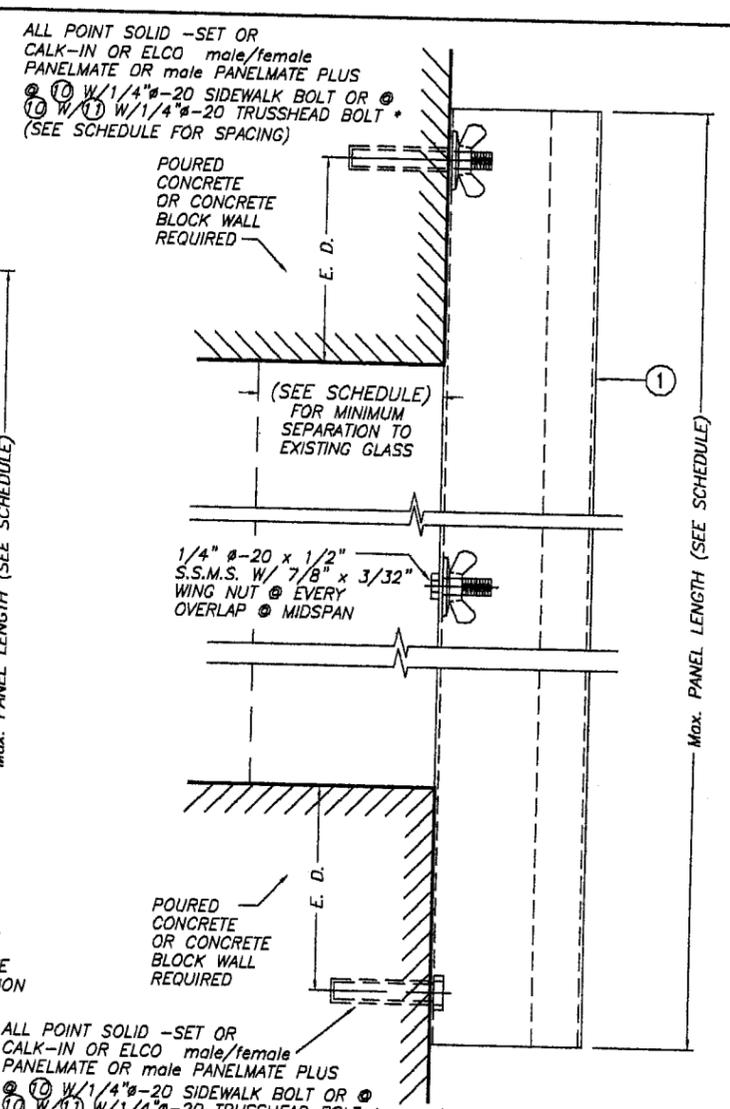
CEILING & FLOOR MOUNTING
INSTALLATION - SECTION 6

SCALE : 3/8" = 1"



CEILING & FLOOR MOUNTING
INSTALLATION - SECTION 7

SCALE : 3/8" = 1"



WALL MOUNTING INSTALLATION (D. M.)
- SECTION 8

SCALE : 3/8" = 1"

E. D. = EDGE DISTANCE
 (SEE SCHEDULE ON
 SHEET 5, 6 & 7 OF 9)

NOTE FOR COMBINATION OF SECTIONS :
 WALL/FLOOR/CEILING MOUNTING SECTIONS CAN BE
 COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

* SIDE WALK BOLTS ARE 3/4" x 3/32" THICK
 HEAD MACHINE SCREW W/LENGTH
 AS PER NOTES A.2 & B.2 (SHEET 1)
 * TRUSS HEAD BOLTS ARE 1/2" x 1/8" THICK
 HEAD MACHINE SCREW W/LENGTH
 AS PER NOTES A.2 & B.2 (SHEET 1)

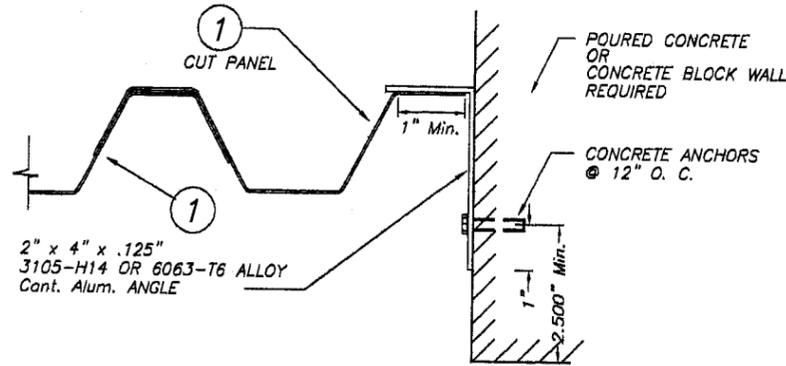
PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 05-0926.02
 Expiration Date 06/07/2009
 By *Helmut A. Miller*
 Miami Dade Product Control
 Division

SEP 15 2005

F.B.C. (High Velocity Hurricane Zone)

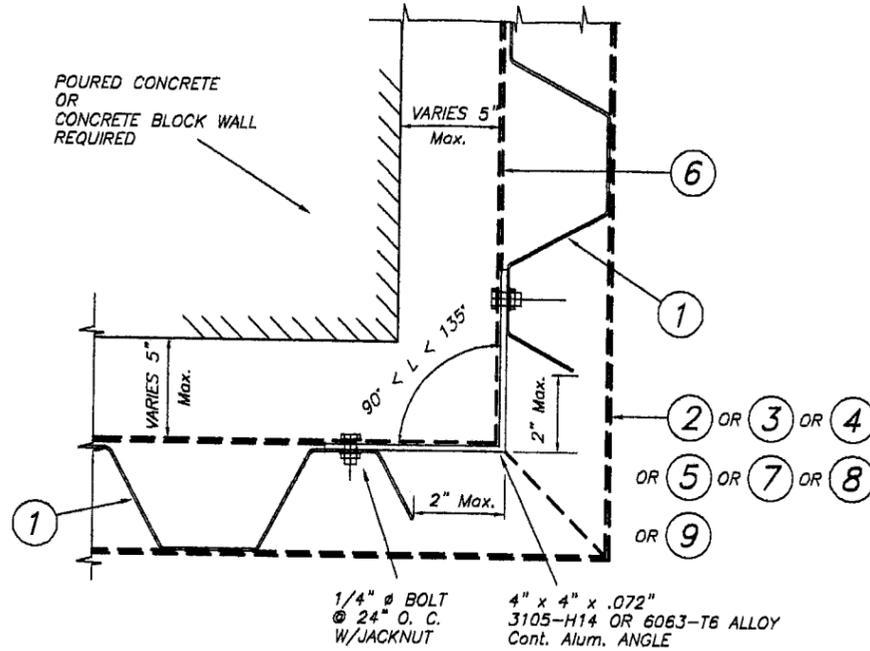
TILECO INC.		0.030" THICK GALVANIZED BERTHA STEEL STORM PANEL		L.G. DRAWN BY:	
TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone : (305)871-1530 . Fax : (305)871-1531 EB-0006719		EASTERN METAL SUPPLY, INC.		4/25/05 DATE	
WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167		4268 WESTROADS DR. WEST PALM BEACH, FL 33407		05-073 DRAWING No	
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 02-446	4/25/05	3	-	-
2	-	-	4	-	-

SHEET 3 OF 9



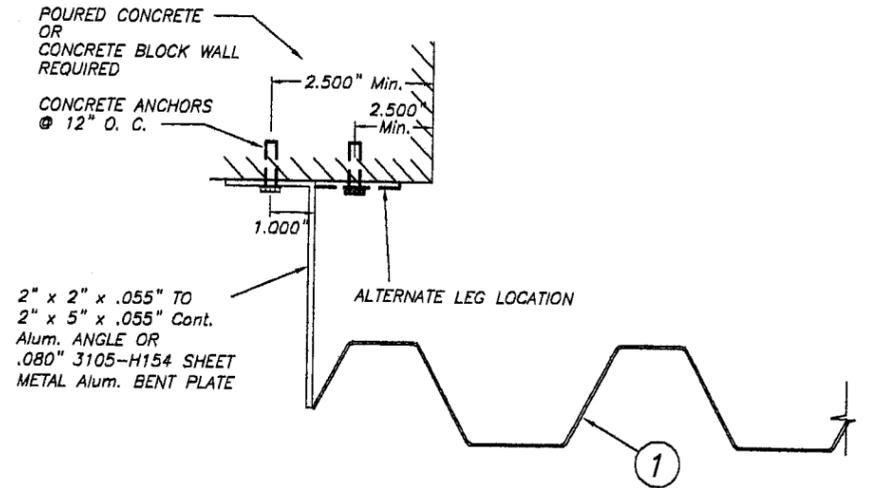
CASE A (Plan)

SCALE: 1/4" = 1"



CASE B (Plan)

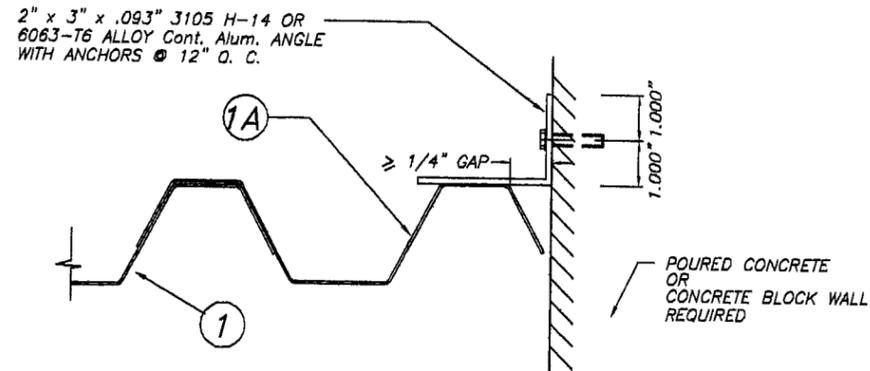
SCALE: 1/4" = 1"



CASE C (Plan)

SCALE: 1/4" = 1"

END CLOSURES DETAILS



CASE D (Plan)

SCALE: 1/4" = 1"

MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM PANEL LENGTH "L" SCHEDULE

MAXIMUM DESIGN PRESSURE RATING W (p.s.f.)	Max. PANEL LENGTH L (ft.) (SEE SECTIONS)	MINIMUM SEPARATION TO GLASS	APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM
+66.0, -76.0	7'-6" OR LESS	3"	1,2,3,4,5 & 8
+60.0, -70.0	>7'-6" TO 8'-6"	3"	1,2,3,4,5 & 8
+66.0, -76.0	7'-6" OR LESS	3 3/4"	6 & 7
+60.0, -70.0	>7'-6" TO 8'-6"	3 3/4"	6 & 7

PRODUCT REVISED as complying with the Florida Building Code Acceptance No 05-0926.02 Expiration Date 06/07/2009 By Helmut A. Meier Miami Dade Product Control Division

F.B.C.(High Velocity Hurricane Zone)

SEP 15 2005

<p>TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone : (305)871-1530 Fax : (305)871-1531 EB-0006719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167</p>	<p>0.030" THICK GALVANIZED BERTHA STEEL STORM PANEL</p>	L.G. DRAWN BY:
	<p>EASTERN METAL SUPPLY, INC.</p> <p>4268 WESTROADS DR. WEST PALM BEACH, FL 33407</p>	<p>4/25/05 DATE</p>
<p>REV. NO DESCRIPTION DATE REV. No DESCRIPTION DATE</p> <p>1 OLD 02-446 4/25/05 3 - - -</p> <p>2 - - - 4 - - -</p>		<p>05-073 DRAWING No</p>
		<p>SHEET 4 OF 9</p>

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **														APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	I.T.W. BUILDEX				ELCO TEXTRON						POWER FASTENERS		ALL POINTS			
	TAPCONS/MAXI-SET TAPCONS		RED HD SLEEVE		CRETE-FLEX SS4		MALE/FEMALE PANELMATE		MALE PANELMATE PLUS		CALK-IN		SOLID-SET			
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY		
+60.0, -61.5	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	1 (TOP)	6'-0" OR LESS
	12"	10"	12"	12"	12"	12"	12"	12"	12"	11"	12"	12"	12"	12"	1 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	12"	12"	2 (TOP)	
	12"	10"	12"	12"	12"	12"	12"	12"	12"	11"	12"	12"	N/A	N/A	2 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	3 (TOP)	
	12"	10"	12"	12"	12"	12"	12"	12"	12"	11"	12"	12"	N/A	N/A	3 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	4 (TOP)	
	12"	10"	12"	12"	12"	12"	12"	12"	12"	11"	12"	12"	N/A	N/A	4 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	5 (TOP)	
	12"	9"	12"	12"	12"	12"	12"	12"	12"	10"	12"	12"	N/A	N/A	5 (BOTTOM)	
12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	6 (TOP)		
12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	6 (BOTTOM)		
N/A	N/A	N/A	N/A	N/A	N/A	12"	6"	12"	12"	12"	12"	12"	12"	7 (TOP/BOTTOM)		
N/A	N/A	N/A	N/A	N/A	N/A	12"	6"	12"	12"	12"	12"	12"	12"	8 (TOP/BOTTOM)		

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **														APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	I.T.W. BUILDEX				ELCO TEXTRON						POWER FASTENERS		ALL POINTS			
	TAPCONS/MAXI-SET TAPCONS		RED HD SLEEVE		CRETE-FLEX SS4		MALE/FEMALE PANELMATE		MALE PANELMATE PLUS		CALK-IN		SOLID-SET			
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY		
+66.0, -72.0	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	1 (TOP)	6'-0" OR LESS
	12"	8"	12"	12"	12"	12"	12"	12"	12"	10"	12"	12"	12"	12"	1 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	12"	12"	2 (TOP)	
	12"	8"	12"	12"	12"	12"	12"	12"	12"	10"	12"	12"	N/A	N/A	2 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	3 (TOP)	
	12"	8"	12"	12"	12"	12"	12"	12"	12"	10"	12"	12"	N/A	N/A	3 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	4 (TOP)	
	12"	8"	12"	12"	12"	12"	12"	12"	12"	10"	12"	12"	N/A	N/A	4 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	5 (TOP)	
	12"	6"	12"	12"	12"	11"	12"	10"	12"	7"	12"	8"	N/A	N/A	5 (BOTTOM)	
12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	6 (TOP)		
10"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	11"	N/A	N/A	N/A	6 (BOTTOM)		
N/A	N/A	N/A	N/A	N/A	N/A	12"	6"	12"	12"	12"	12"	12"	12"	7 (TOP/BOTTOM)		
N/A	N/A	N/A	N/A	N/A	N/A	12"	6"	12"	12"	12"	12"	12"	12"	8 (TOP/BOTTOM)		

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **														APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	I.T.W. BUILDEX				ELCO TEXTRON						POWER FASTENERS		ALL POINTS			
	TAPCONS/MAXI-SET TAPCONS		RED HD SLEEVE		CRETE-FLEX SS4		MALE/FEMALE PANELMATE		MALE PANELMATE PLUS		CALK-IN		SOLID-SET			
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY		
+60.0, -61.5	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	1 (TOP)	>6'-0" TO 7'-6"
	12"	8"	12"	12"	12"	12"	12"	12"	12"	8"	12"	11"	12"	12"	1 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	12"	12"	2 (TOP)	
	12"	8"	12"	12"	12"	12"	12"	12"	12"	9"	12"	11"	N/A	N/A	2 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	3 (TOP)	
	12"	8"	12"	12"	12"	12"	12"	12"	12"	9"	12"	11"	N/A	N/A	3 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	4 (TOP)	
	12"	8"	12"	12"	12"	12"	12"	12"	12"	9"	12"	11"	N/A	N/A	4 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	5 (TOP)	
	12"	5"	12"	11"	12"	10"	12"	9"	12"	6"	12"	7"	N/A	N/A	5 (BOTTOM)	
12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	6 (TOP)		
11"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	6 (BOTTOM)		
9"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	N/A	N/A	7 (TOP/BOTTOM)		
N/A	N/A	N/A	N/A	N/A	N/A	12"	12"	12"	6"	12"	6"	12"	12"	8 (TOP/BOTTOM)		

MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING SCHEDULE FOR INSTALLATIONS INTO CONCRETE AND CONCRETE BLOCK STRUCTURES *

** MAXIMUM ANCHOR SPACINGS ARE VALID FOR 3 1/2" EDGE DISTANCE. FOR E. D. LESS THAN 3 1/2"; REDUCE ANCHOR SPACING BY MULTIPLYING SPACING SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. (NOTE : Min. E. D. FOR CALK-IN ANCHORS IS 2 1/2"). FOR THIS OPERATION TO BE POSSIBLE, REDUCED SPACING OBTAINED USING FACTOR SHALL NOT BE LESS THAN MINIMUM SPACING INDICATED FOR EACH ANCHOR TYPE AT ANCHORS LEGEND.

ACTUAL E. D.	FACTOR			
	TAPCON/ CRETE-FLEX SS4/ PANELMATES	CALK-IN	SOLID-SET	RED HD. SLEEVE
3"	.86	.75	.78	1.00
2 1/2"	.71	.50	-	1.00
2"	.50	-	-	0.88

ANCHORS LEGEND

ANCHORS TYPE	ANCHOR MIN. SPACING
TAPCON/PANELMATES/ CRETE FLEX SS4	3.0"
CALK-IN	2.5"
SOLID-SET	3.5"
3/8"Ø RED HD. DYNABOLT SLEEVE	4.5"

E. D. = EDGE DISTANCE

SEP 15 2005

*SEE NOTES ON SHEET 8 & 9 OF 9 FOR ANCHOR TYPES & SPACING FOR INSTALLATIONS INTO WOOD FRAME BUILDINGS.

PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No 05-9926.02
 Expiration Date 06/07/2009
 By *Heather A. Miller*
 Miami Dade Product Control Division

F.B.C.(High Velocity Hurricane Zone)

 TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone : (305)871-1530 . Fax : (305)871-1531 EB-0006719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167	0.030" THICK GALVANIZED BERTHA STEEL STORM PANEL	L.G. DRAWN BY:
	EASTERN METAL SUPPLY, INC. 4268 WESTROADS DR. WEST PALM BEACH, FL 33407	4/25/05 DATE
REV. NO. DESCRIPTION DATE REV. NO. DESCRIPTION DATE 1 OLD 02-446 4/25/05 3 - - 2 - - 4 - -	05-073 DRAWING No	SHEET 5 OF 9

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **														APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)	
	I.T.W. BUILDEX				ELCO TETRON						POWER FASTENERS		ALL PONTS				
	TAPCONS/MAXI-SET TAPCONS		RED HD SLEEVE		CRETE-FLEX SS4		MALE/FEMALE PANELMATE		MALE PANELMATE PLUS		CALK-IN		SOLID-SET				
TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY		
+86.0, -72.0	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	1 (TOP)	>6'-0" TO 7'-6"	
	12"	6"	12"	12"	12"	12"	12"	12"	11"	12"	8"	12"	9"	12"	12"		1 (BOTTOM)
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	2 (TOP)		
	12"	6"	12"	12"	12"	12"	12"	12"	11"	12"	8"	12"	9"	N/A	N/A		2 (BOTTOM)
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	3 (TOP)		
	12"	6"	12"	12"	12"	12"	12"	12"	11"	12"	8"	12"	9"	N/A	N/A		3 (BOTTOM)
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	4 (TOP)		
	12"	6"	12"	12"	12"	12"	12"	12"	11"	12"	8"	12"	9"	N/A	N/A		4 (BOTTOM)
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	5 (TOP)		
	11"	4"	12"	8"	12"	7"	12"	6"	12"	4"	11"	5"	N/A	N/A	5 (BOTTOM)		
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	11"	N/A	N/A	N/A	6 (TOP)		
	9"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	8"	N/A	N/A	N/A	6 (BOTTOM)		
	8"	N/A	11"	N/A	11"	N/A	12"	N/A	10"	N/A	7"	N/A	N/A	N/A	7 (TOP/BOTTOM)		
	N/A	N/A	N/A	N/A	N/A	N/A	6"	12"	12"	6"	12"	6"	12"	12"	8 (TOP/BOTTOM)		

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **														APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	I.T.W. BUILDEX				ELCO TETRON						POWER FASTENERS		ALL PONTS			
	TAPCONS/MAXI-SET TAPCONS		RED HD SLEEVE		CRETE-FLEX SS4		MALE/FEMALE PANELMATE		MALE PANELMATE PLUS		CALK-IN		SOLID-SET			
TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	
+60.0, -61.5	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	1 (TOP)	>7'-6" TO 8'-6"
	12"	7"	12"	12"	12"	12"	12"	12"	8"	12"	10"	12"	12"	1 (BOTTOM)		
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	2 (TOP)	
	12"	7"	12"	12"	12"	12"	12"	12"	8"	12"	10"	N/A	N/A	2 (BOTTOM)		
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	3 (TOP)	
	12"	7"	12"	12"	12"	12"	12"	12"	8"	12"	10"	N/A	N/A	N/A	3 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	4 (TOP)	
	12"	7"	12"	12"	12"	12"	12"	12"	8"	12"	10"	N/A	N/A	N/A	4 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	5 (TOP)	
	12"	4"	12"	9"	12"	7"	12"	7"	12"	4"	12"	6"	N/A	N/A	5 (BOTTOM)	
	9"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	11"	N/A	N/A	N/A	6 (TOP)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	9"	N/A	N/A	N/A	6 (BOTTOM)	
	8"	N/A	12"	N/A	11"	N/A	12"	N/A	11"	N/A	7"	N/A	N/A	N/A	7 (TOP/BOTTOM)	
	N/A	N/A	N/A	N/A	N/A	N/A	12"	12"	12"	6"	12"	6"	12"	12"	8 (TOP/BOTTOM)	

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **														APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	I.T.W. BUILDEX				ELCO TETRON						POWER FASTENERS		ALL PONTS			
	TAPCONS/MAXI-SET TAPCONS		RED HD SLEEVE		CRETE-FLEX SS4		MALE/FEMALE PANELMATE		MALE PANELMATE PLUS		CALK-IN		SOLID-SET			
TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	
+66.0, -72.0	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	1 (TOP)	>7'-6" TO 8'-6"
	12"	6"	12"	12"	12"	11"	12"	10"	12"	7"	12"	8"	12"	12"	1 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	2 (TOP)	
	12"	6"	12"	12"	12"	11"	12"	10"	12"	7"	12"	8"	N/A	N/A	2 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	3 (TOP)	
	12"	6"	12"	12"	12"	11"	12"	10"	12"	7"	12"	8"	N/A	N/A	3 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	4 (TOP)	
	12"	6"	12"	12"	12"	11"	12"	10"	12"	7"	12"	8"	N/A	N/A	4 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	5 (TOP)	
	9"	3"	11"	7"	12"	6"	12"	5"	12"	3"	9"	4"	N/A	N/A	5 (BOTTOM)	
	11"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	10"	N/A	N/A	N/A	6 (TOP)	
	8"	N/A	12"	N/A	12"	N/A	11"	N/A	11"	N/A	7"	N/A	N/A	N/A	6 (BOTTOM)	
	7"	N/A	10"	N/A	9"	N/A	10"	N/A	9"	N/A	6"	N/A	N/A	N/A	7 (TOP/BOTTOM)	
	N/A	N/A	N/A	N/A	N/A	N/A	12"	10"	12"	6"	12"	6"	12"	12"	8 (TOP/BOTTOM)	

MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING SCHEDULE FOR INSTALLATIONS INTO CONCRETE AND CONCRETE BLOCK STRUCTURES *

** MAXIMUM ANCHOR SPACINGS ARE VALID FOR 3 1/2" EDGE DISTANCE. FOR E. D. LESS THAN 3 1/2", REDUCE ANCHOR SPACING BY MULTIPLYING SPACING SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. (NOTE : Min. E. D. FOR CALK-IN ANCHORS IS 2 1/2"). FOR THIS OPERATION TO BE POSSIBLE, REDUCED SPACING OBTAINED USING FACTOR SHALL NOT BE LESS THAN MINIMUM SPACING INDICATED FOR EACH ANCHOR TYPE AT ANCHORS LEGEND.

ACTUAL E. D.	FACTOR			
	TAPCON/ CRETE-FLEX SS4/ PANELMATES	CALK-IN	SOLID-SET	RED HD. SLEEVE
3"	.86	.75	.78	1.00
2 1/2"	.71	.50	-	1.00
2"	.50	-	-	0.88

ANCHORS LEGEND

ANCHORS TYPE	ANCHOR MIN. SPACING
TAPCON/PANELMATES/ CRETE FLEX SS4	3.0"
CALK-IN	2.5"
SOLID-SET	3.5"
3/8"Ø RED HD. DYNABOLT SLEEVE	4.5"

E. D. = EDGE DISTANCE

SEP 15 2005

*SEE NOTES ON SHEET 8 & 9 OF 9 FOR ANCHOR TYPES & SPACING FOR INSTALLATIONS INTO WOOD FRAME BUILDINGS.

PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No. 05-0926.02
 Expiration Date 06/07/2009
 By *Helmy A. Hader*
 Miami Dade Product Control Division

F.B.C.(High Velocity Hurricane Zone)

 TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone : (305)871-1530 Fax : (305)871-1531 EB-0006719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167	0.030" THICK GALVANIZED BERTHA STEEL STORM PANEL	L.G. DRAWN BY:																		
	EASTERN METAL SUPPLY, INC. 4268 WESTROADS DR. WEST PALM BEACH, FL 33407	4/25/05 DATE 05-073 DRAWING No																		
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REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE															
1	OLD 02-446	4/25/05	3	-	-															
2	-	-	4	-	-															

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **														APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	I.T.W. BUILDEX				ELCO TEXTRON				POWER FASTENERS		ALL POINTS					
	TAPCONS/MAXI-SET TAPCONS		RED HD SLEEVE		CRETE-FLEX SS4		MALE/FEMALE PANELMATE		MALE PANELMATE PLUS		CALK-IN		SOLID-SET			
TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY			
+66.0, -76.0	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	1 (TOP)	6'-0" OR LESS
	12"	8"	12"	12"	12"	12"	12"	12"	9"	12"	11"	12"	12"	1 (BOTTOM)		
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	12"	2 (TOP)		
	12"	8"	12"	12"	12"	12"	12"	12"	9"	12"	11"	N/A	N/A	2 (BOTTOM)		
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	3 (TOP)		
	12"	8"	12"	12"	12"	12"	12"	12"	9"	12"	11"	N/A	N/A	3 (BOTTOM)		
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	4 (TOP)		
	12"	8"	12"	12"	12"	12"	12"	12"	9"	12"	11"	N/A	N/A	4 (BOTTOM)		
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	5 (TOP)		
	12"	5"	12"	12"	12"	10"	12"	9"	12"	6"	12"	7"	N/A	N/A	5 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	6 (TOP)		
	11"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	6 (BOTTOM)		
	9"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	10"	N/A	N/A	7 (TOP/BOTTOM)		
	N/A	N/A	N/A	N/A	N/A	N/A	12"	12"	12"	6"	12"	6"	12"	12"	8 (TOP/BOTTOM)	

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **														APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	I.T.W. BUILDEX				ELCO TEXTRON				POWER FASTENERS		ALL POINTS					
	TAPCONS/MAXI-SET TAPCONS		RED HD SLEEVE		CRETE-FLEX SS4		MALE/FEMALE PANELMATE		MALE PANELMATE PLUS		CALK-IN		SOLID-SET			
TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY			
+66.0, -76.0	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	1 (TOP)	>6'-0" TO 7'-6"
	12"	6"	12"	12"	12"	12"	11"	12"	7 1/2"	12"	8"	12"	12"	1 (BOTTOM)		
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	12"	2 (TOP)		
	12"	6 1/2"	12"	12"	12"	12"	12"	12"	7 1/2"	12"	8"	N/A	N/A	2 (BOTTOM)		
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	3 (TOP)		
	12"	6"	12"	12"	12"	12"	11"	12"	7 1/2"	12"	9"	N/A	N/A	3 (BOTTOM)		
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	4 (TOP)		
	12"	8"	12"	12"	12"	12"	11"	12"	7 1/2"	12"	9"	N/A	N/A	4 (BOTTOM)		
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	5 (TOP)		
	10 1/2"	3 1/2"	12"	7 1/2"	12"	6 1/2"	12"	6"	12"	4"	10 1/2"	5"	N/A	N/A	5 (BOTTOM)	
	11 1/2"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	10 1/2"	N/A	N/A	N/A	6 (TOP)	
	9"	N/A	12"	N/A	12"	N/A	12"	N/A	11 1/2"	N/A	8"	N/A	N/A	N/A	6 (BOTTOM)	
	7 1/2"	N/A	11"	N/A	10 1/2"	N/A	11 1/2"	N/A	10"	N/A	7"	N/A	N/A	N/A	7 (TOP/BOTTOM)	
	N/A	N/A	N/A	N/A	N/A	N/A	12"	6"	12"	6"	12"	6"	12"	12"	8 (TOP/BOTTOM)	

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **														APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	I.T.W. BUILDEX				ELCO TEXTRON				POWER FASTENERS		ALL POINTS					
	TAPCONS/MAXI-SET TAPCONS		RED HD SLEEVE		CRETE-FLEX SS4		MALE/FEMALE PANELMATE		MALE PANELMATE PLUS		CALK-IN		SOLID-SET			
TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY			
+66.0, -70.0	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	1 (TOP)	>7'-6" TO 8'-6"
	12"	5"	12"	12"	12"	10"	12"	9"	12"	6"	12"	8"	12"	12"	1 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	12"	12"	2 (TOP)		
	12"	5"	12"	12"	12"	10"	12"	9"	12"	6"	12"	8"	N/A	N/A	2 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	3 (TOP)	
	12"	5"	12"	12"	12"	10"	12"	9"	12"	6"	12"	8"	N/A	N/A	3 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	4 (TOP)	
	12"	5"	12"	12"	12"	10"	12"	9"	12"	6"	12"	8"	N/A	N/A	4 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	5 (TOP)	
	8"	N/A	10"	6"	12"	5"	11"	5"	11"	3"	8"	4"	N/A	N/A	5 (BOTTOM)	
	10"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	9"	N/A	N/A	N/A	6 (TOP)	
	8"	N/A	11"	N/A	12"	N/A	10"	N/A	10"	N/A	7"	N/A	N/A	N/A	6 (BOTTOM)	
	7"	N/A	9"	N/A	9"	N/A	10"	N/A	9"	N/A	6"	N/A	N/A	N/A	7 (TOP/BOTTOM)	
	N/A	N/A	N/A	N/A	N/A	N/A	12"	10"	12"	6"	12"	6"	12"	12"	8 (TOP/BOTTOM)	

MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING SCHEDULE FOR INSTALLATIONS INTO CONCRETE AND CONCRETE BLOCK STRUCTURES *

** MAXIMUM ANCHOR SPACINGS ARE VALID FOR 3 1/2" EDGE DISTANCE. FOR E. D. LESS THAN 3 1/2", REDUCE ANCHOR SPACING BY MULTIPLYING SPACING SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. (NOTE: Min. E. D. FOR CALK-IN ANCHORS IS 2 1/2"). FOR THIS OPERATION TO BE POSSIBLE, REDUCED SPACING OBTAINED USING FACTOR SHALL NOT BE LESS THAN MINIMUM SPACING INDICATED FOR EACH ANCHOR TYPE AT ANCHORS LEGEND.

ACTUAL E. D.	FACTOR			
	TAPCON/CRETE-FLEX SS4/PANELMATES	CALK-IN	SOLID-SET	RED HD. SLEEVE
3"	.86	.75	.78	1.00
2 1/2"	.71	.50	-	1.00
2"	.50	-	-	0.88

ANCHORS LEGEND

ANCHORS TYPE	ANCHOR MIN. SPACING
TAPCON/PANELMATES/CRETE FLEX SS4	3.0"
CALK-IN	2.5"
SOLID-SET	3.5"
3/8"Ø RED HD. DYNABOLT SLEEVE	4.5"

E. D. = EDGE DISTANCE

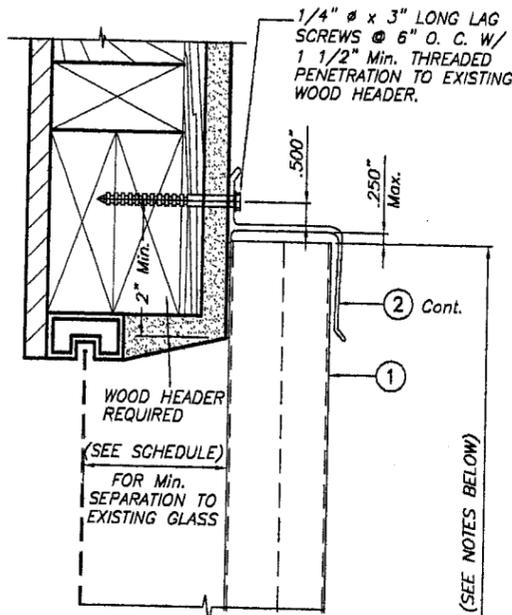
SEP 15 2005

*SEE NOTES ON SHEET 8 & 9 OF 9 FOR ANCHOR TYPES & SPACING FOR INSTALLATIONS INTO WOOD FRAME BUILDINGS.

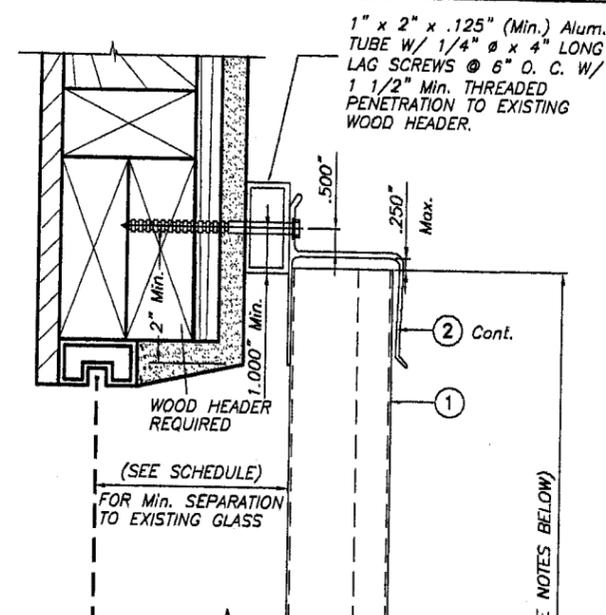
PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No 05-0926.02
 Expiration Date 06/07/2009
 By *Helmut A. Miller*
 Miami Dade Product Control Division

F.B.C.(High Velocity Hurricane Zone)

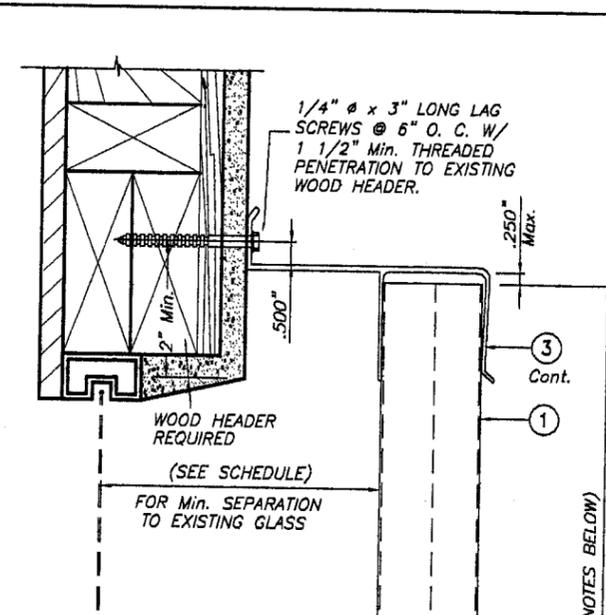
 TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33188 Phone: (305)871-1530 Fax: (305)871-1531 EB-0006719 WALTER A. TILLIT, Jr. P. E. FLORIDA Lic. # 44167	0.030" THICK GALVANIZED BERTHA STEEL STORM PANEL EASTERN METAL SUPPLY, INC. 4268 WESTROADS DR. WEST PALM BEACH, FL 33407	L.G. DRAWN BY: 4/25/05 DATE 05-073 DRAWING No SHEET 7 OF 9																		
	<table border="1"> <thead> <tr> <th>REV. NO</th> <th>DESCRIPTION</th> <th>DATE</th> <th>REV. NO</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>OLD 02-446</td> <td>4/25/05</td> <td>3</td> <td>-</td> <td>-</td> </tr> <tr> <td>2</td> <td>-</td> <td>-</td> <td>4</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	REV. NO	DESCRIPTION	DATE	REV. NO	DESCRIPTION	DATE	1	OLD 02-446	4/25/05	3	-	-	2	-	-	4	-	-	
REV. NO	DESCRIPTION	DATE	REV. NO	DESCRIPTION	DATE															
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2	-	-	4	-	-															



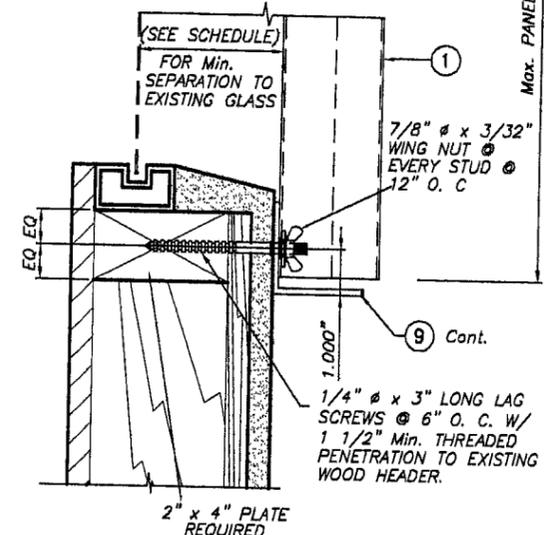
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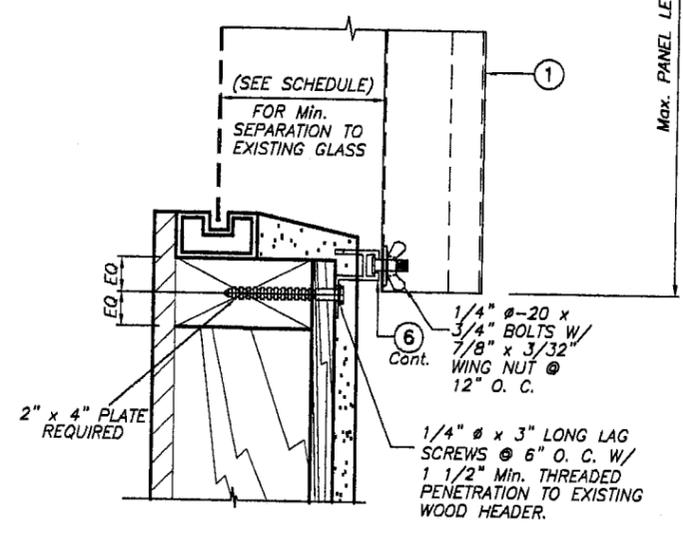
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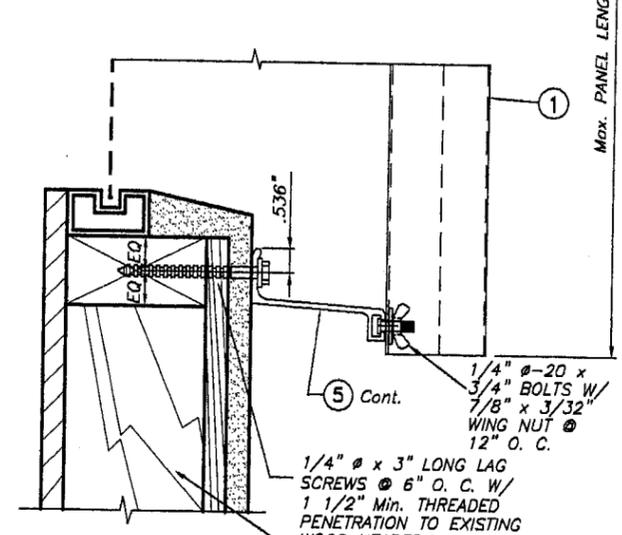
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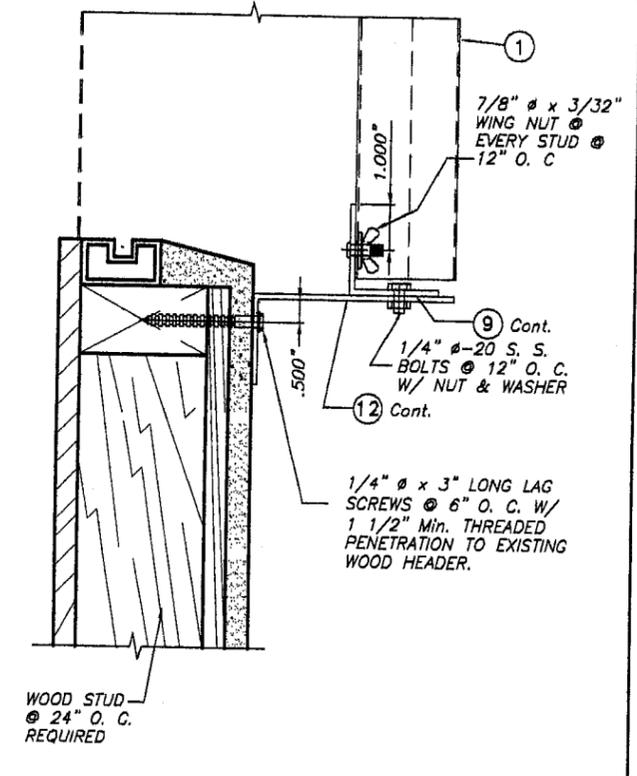
ALTERNATIVE 2



ALTERNATIVE 4



ALTERNATIVE 6



ALTERNATIVE 7

WALL MOUNTING INSTALLATIONS

SECTIONS A

SCALE : 1/4" = 1"

INSTALLATION DETAILS ON EXISTING WOOD BUILDINGS

NOTE FOR COMBINATION OF SECTIONS:
WALL MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

NOTES:
1. INSTALLATIONS ARE ONLY VALID FOR DESIGN WIND LOADS AND Max. PANEL LENGTHS AS PER SCHEDULE ON SHEET 4 OF 9
2. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

PRODUCT REVISED as complying with the Florida Building Code
Acceptance No. 05-0926.02
Expiration Date 06/07/2009
By *Helene A. Miller*
Miami Dade Product Control Division

F.B.C.(High Velocity Hurricane Zone)

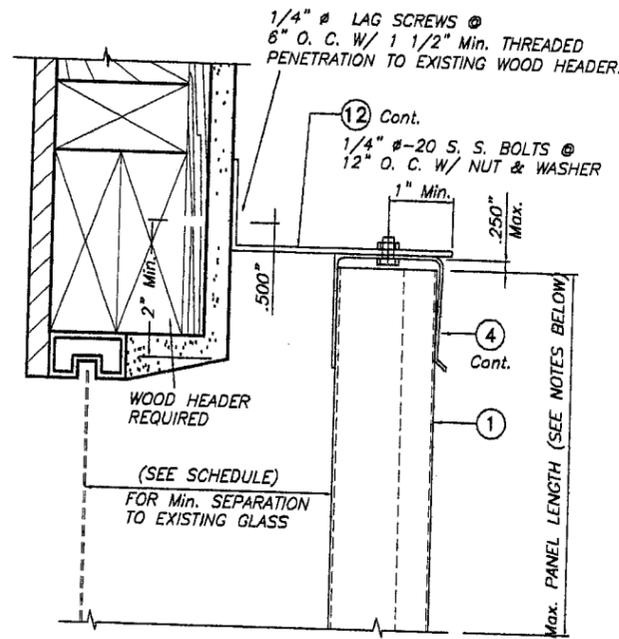
SEP 15 2005

TILECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33186
Phone : (305)871-1830 Fax : (305)871-1831
EB-0006719
WALTER A. TILLIT Jr. P. E.
FLORIDA Lic. # 44167

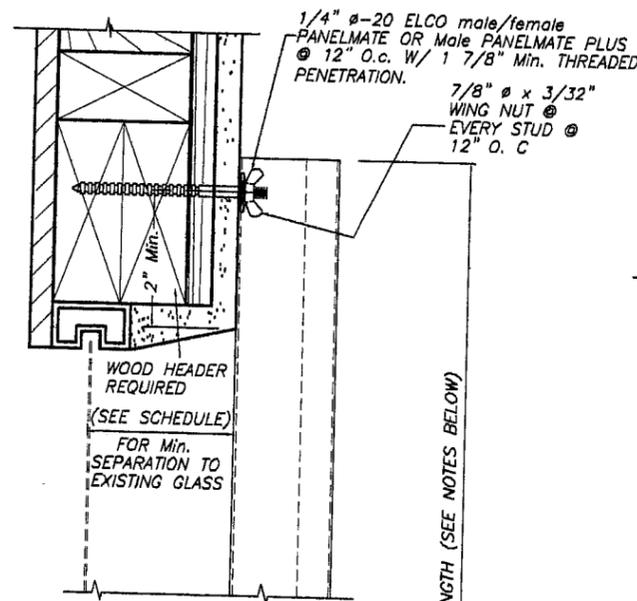
0.030" THICK GALVANIZED BERTHA STEEL STORM PANEL
EASTERN METAL SUPPLY, INC.
4268 WESTROADS DR.
WEST PALM BEACH, FL 33407

L.G. DRAWN BY:	4/25/05 DATE	05-073 DRAWING No
SHEET 8 OF 9		

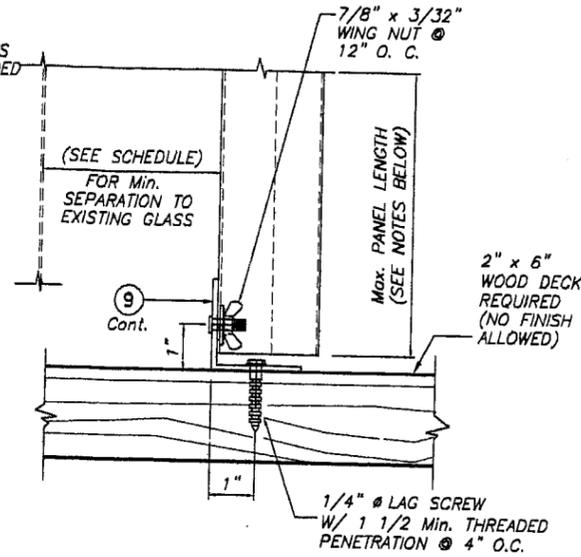
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2	-	-	4	-	-



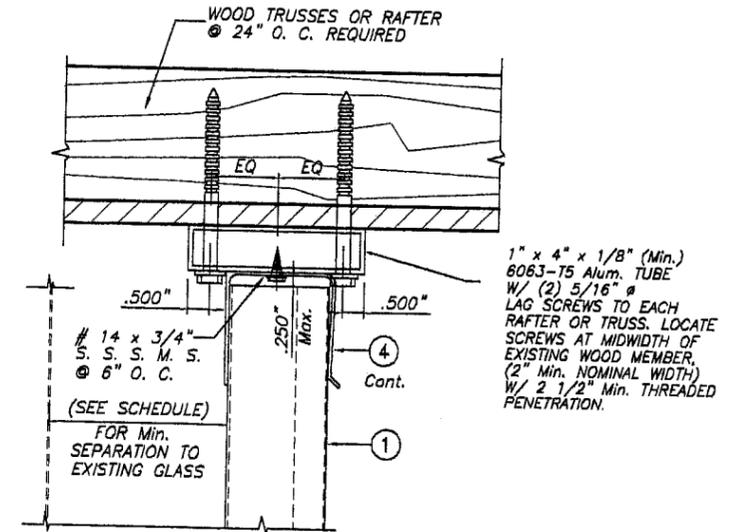
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ALTERNATIVE 10



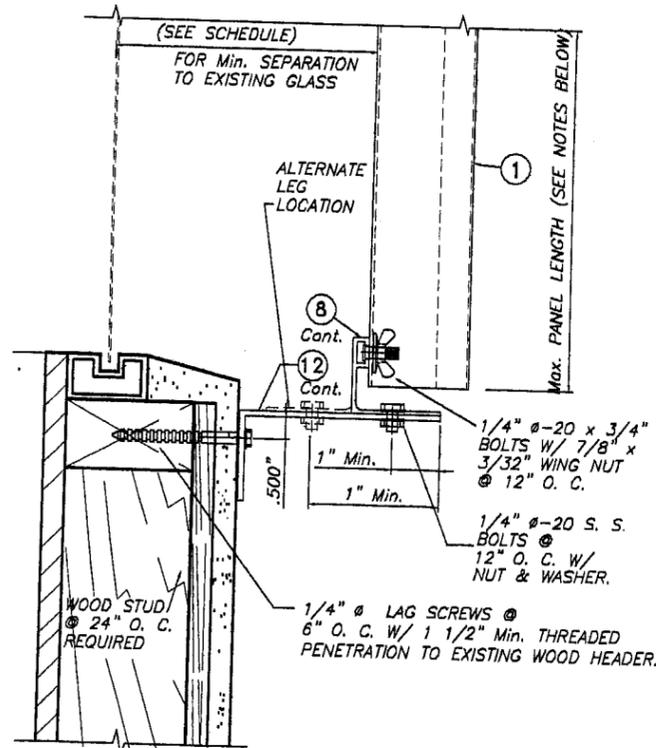
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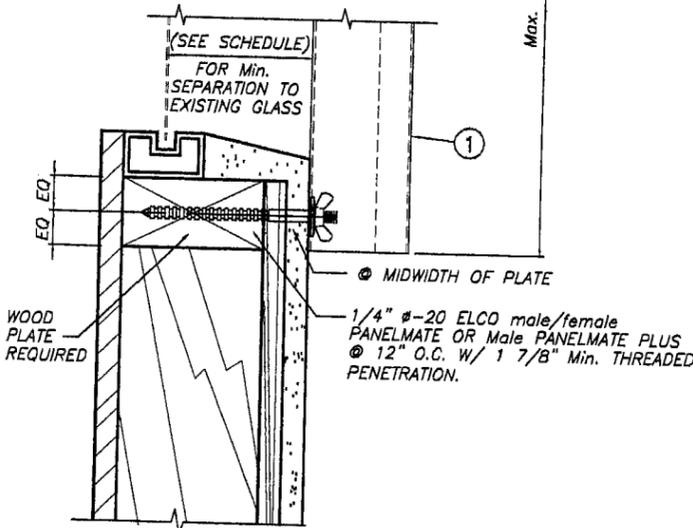
ALTERNATIVE 3

(Max. DESIGN LOAD = ± 61.0 psf
Max. PANEL LOAD = 8'-0")

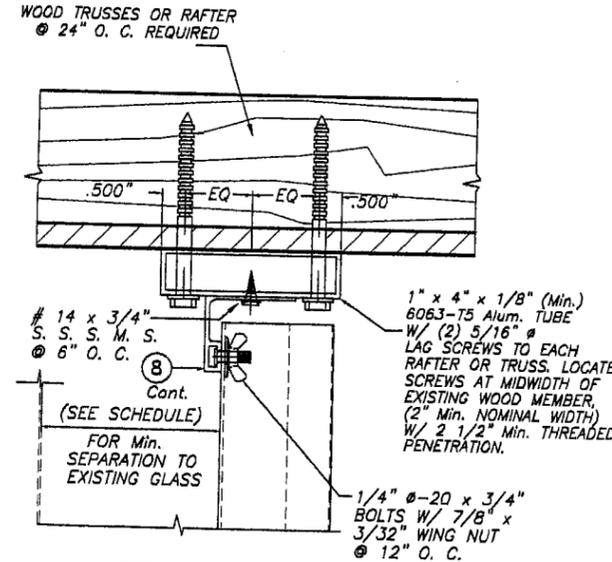
PRODUCT REVISED
as complying with the Florida
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Acceptance No. 05-0926.02
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By *Helmy A. Miller*
Miami Dade Product Control
Division



ALTERNATIVE 9

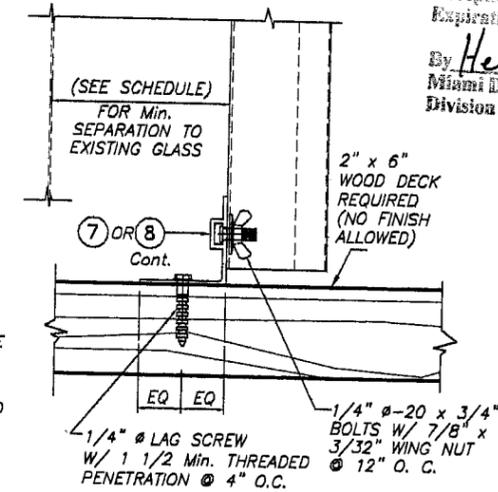


ALTERNATIVE 11



ALTERNATIVE 2

(Max. DESIGN LOAD = ± 61.0 psf
Max. PANEL LOAD = 8'-0")



ALTERNATIVE 4

WALL MOUNTING INSTALLATIONS

SECTIONS A

SCALE : 1/4" = 1"

NOTE FOR COMBINATION OF SECTIONS:

FLOOR/ WALL/ CEILING MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

INSTALLATION DETAILS ON EXISTING WOOD BUILDINGS

CEILING & FLOOR MOUNTING INSTALLATIONS

SECTIONS B

SCALE : 1/4" = 1"

NOTES:

- INSTALLATIONS ARE ONLY VALID FOR DESIGN WIND LOADS AND Max. PANEL LENGTHS AS PER SCHEDULE ON SHEET 4 OF 9, EXCEPT THAT FOR ALTERNATIVES 2 AND 3 A Max. PANEL LENGTH OF 8'-0" AND A Max. DESIGN LOAD OF ± 61.0 PSF SHALL BE USED.
- FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

F.B.C.(High Velocity Hurricane Zone)

TILECO Inc.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33186
Phone : (305)871-1530, Fax : (305)871-1531
EB-0006719
WALTER A. TILLIT Jr., P. E.
FLORIDA Lic. # 44167

0.030" THICK GALVANIZED BERTHA STEEL STORM PANEL		L.G. DRAWN BY:
EASTERN METAL SUPPLY, INC.		4/25/05 DATE
4268 WESTROADS DR. WEST PALM BEACH, FL 33407		05-073 DRAWING No
REV. NO	DESCRIPTION	DATE
1	OLD 02-446	4/25/05
2	-	-
REV. No	DESCRIPTION	DATE
3	-	-
4	-	-
SHEET 9 OF 9		

SEP 15 2005